#### DEPARTMENT OF DEFENSE

## Department of the Navy

Record of Decision for the Final Environmental Impact Statement (EIS) for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex, Island County, Washington

AGENCY: Department of the Navy, DoD

ACTION: Record of Decision

SUMMARY: The U.S. Department of the Navy (Navy), after carefully weighing the strategic, operational, and environmental consequences of the proposed action, announces its decision to implement Alternative 2A (the Preferred Alternative), which adds 36 EA-18G operational aircraft at Naval Air Station (NAS) Whidbey Island, stations additional personnel and their family members at the NAS Whidbey Island complex and in the surrounding community, constructs and renovates facilities at Ault Field, increases airfield operations at both Ault Field and Outlying Landing Field (OLF) Coupeville, and changes the distribution of field carrier landing practice (FCLP) to 20 percent occurring at Ault Field and 80 percent occurring at OLF Coupeville. This decision does not change the continuation of airfield operations for other aircraft (e.g., P-8A, P-3C, EP-3, MH-60 and transients) operating from the NAS Whidbey Island complex.

The implementation of Alternative 2A includes measures intended to reduce noise impacts in the community, including the mitigation measures identified in Appendix H of the Final EIS, and the use of Precision Landing Mode (PLM, a.k.a. Magic Carpet) to reduce the overall number of FCLPs compared to the number proposed in the Draft EIS. The Navy will continue to invest in new technologies to reduce aircraft engine noise. to mitigating impacts to the perceptual qualities of five locations that contribute to the significance of the historic landscape located within the Central Whidbey Island Historic District, the Navy will provide \$867,000.00 to the National Park Service (NPS) to support preservation projects at the historic Ferry House that meet the Secretary of the Interior standards for preservation. In addition, the Navy will provide up to \$20,000.00 to the NPS for the design, construction, and installation of interpretive historical signs at appropriate locations. The Navy will also seek partnership opportunities through the Readiness and Environmental Protection Integration (REPI) program by working with the community to identify

potential REPI projects and communicating its support for those projects to decision-making officials in the DoD. Finally, the Navy will collaborate with stakeholders to evaluate the benefits of designating historic landscapes within the Area of Potential Effect (APE) as Sentinel Landscapes.

With respect to regulatory requirements, the Navy has and will continue to coordinate with appropriate federal regulatory and state resource agencies and comply with appropriate permits and reporting requirements.

FOR FURTHER INFORMATION, CONTACT: U.S. Navy Growler EIS Project Manager, Naval Facilities Engineering Command Atlantic, Attn: Code EV21/SS, 6506 Hampton Boulevard, Norfolk, Virginia 23508.

SUPPLEMENTARY INFORMATION: Pursuant to section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, sections 4321 et seq. of title 42, U.S.C., Council of Environmental Quality regulations (parts 1500-1508 of title 40 CFR), and Department of the Navy regulations (part 775 of title 32 CFR), the Navy announces its decision to implement Alternative 2A as described in the Final EIS. This decision will enable the Navy to continue and expand existing EA-18G "Growler" operations at the NAS Whidbey Island complex; to increase electronic attack capabilities by adding 36 operational aircraft to support an expanded U.S. Department of Defense (DoD) mission; to construct and renovate facilities at Ault Field to accommodate additional Growler aircraft; and to station additional personnel and their family members at NAS Whidbey Island complex and in the surrounding community. The proposed action will enable the Navy to augment the Navy's existing Electronic Attack community at NAS Whidbey Island complex with additional aircraft in order to provide Combatant Commanders with expanded electronic attack capabilities to support our national defense requirements consistent with the Navy's responsibilities under Title 10, United States Code (U.S.C), Section 8062. In selecting which alternative to implement, the Navy carefully considered a number of factors, including the strategic and operational importance of augmenting our nation's electronic attack capabilities, ensuring quality of pilot training, and balancing the impacts of the proposed action on the human and natural environment. Appropriate mitigation measures consistent with operational requirements and our Title 10 responsibilities were also considered in order to potentially lessen the effects on all surrounding communities.

B. BACKGROUND AND ISSUES: NAS Whidbey Island complex has supported naval aviation for more than 75 years and the Navy's tactical electronic warfare community for more than 45 years. The EA-18G Growler aircraft have been home based and operating from NAS Whidbey Island complex since 2008. As a result, the Navy has significant existing infrastructure and training ranges that support the Growler in the Pacific Northwest. In June 2013, the U.S. DoD Appropriations Act of 2014 (Public Law No: 113-76) added additional EA-18G Growler aircraft and necessary funding to augment the Growler community. In 2015 and 2016, Congress authorized and appropriated money for the purchase of additional Growler aircraft.

There are three types of Growler squadrons supporting DoD's tactical airborne electronic attack mission: carrier squadrons which deploy from aircraft carriers and conduct periodic FCLP to requalify to land on aircraft carriers; expeditionary squadrons, including one reserve squadron, which deploy to overseas landbased locations and, therefore, do not normally require periodic FCLP prior to deployment; and the training squadron, which is also known as the Fleet Replacement Squadron (FRS), which is responsible for "post-graduate" training of Navy pilots and Naval Flight Officers. In addition to being the home of the Growler community, Ault Field is the West Coast home of the Maritime Patrol community operating P-3C and P-8A aircraft, and Fleet Air Reconnaissance squadrons operating EP-3 and three MH-60 search and rescue helicopters. Flight operations of these aircraft are not part of the proposed action but were considered in this environmental analysis.

#### Purpose and Need

The purpose of the Proposed Action is to augment the Navy's existing Electronic Attack community at NAS Whidbey Island complex by operating additional Growler aircraft that Congress has directed the Navy to purchase and operate. The Navy needs to effectively and efficiently increase electronic attack capabilities to counter increasingly sophisticated threats, and to provide more aircraft per squadron to give operational commanders more flexibility in addressing current and future threats and missions. The need for the Proposed Action is to maintain and expand Growler operational readiness to support national defense requirements under Title 10, United States Code, Section 8062.

### Public Involvement

# Scoping

A Notice of Intent to prepare an Environmental Impact Statement (EIS) was published in the Federal Register (78 Federal Register [FR] 54635) on September 5, 2013, which opened a 139-day initial public scoping period from September 5, 2013, to January 3, A 15-day extension of the scoping period occurred between January 13 and 31, 2014 (see Federal Register on January 17, 2014 [79 FR 3188]). Following a decision by the Chief of Naval Operations in spring 2014 to request the purchase of additional Growler aircraft, the Navy opened a new 93-day scoping period on October 8, 2014, which included publication of a revised Notice of Intent in the Federal Register on October 10, 2014 (79 FR 61296), and an additional scoping period was announced in the Federal Register and to local daily and weekly papers on November 17, 2014 (79 FR 221). In addition to Federal Register announcements, multiple tools were used to notify the public and interested parties of the scoping periods, including: newspaper and digital advertisements in local daily and weekly papers, press releases, publication on the project website, as well as phone calls to elected leaders, and direct mailing of letters and postcards to federal, state, and local agencies; Native American tribes; elected officials; and various groups most likely to be interested in the proposed action. Over the two scoping periods, a total of eight scoping meetings were held in Coupeville, Oak Harbor, Anacortes, Lopez Island, and Port Townsend, Washington. A total of 1,307 individuals attended the eight scoping meetings and 3,648 scoping comments were collected during the open comment periods.

## Draft EIS

The Notice of Availability of the Draft EIS was published in the Federal Register on November 10, 2016 (81 FR 79019). The Draft EIS public comment period was open from November 10, 2016, to January 25, 2017. Following requests from elected officials and the public, the comment period was extended from the initial deadline of January 25, 2017, to February 24, 2017. In addition to Federal Register announcements (82 FR 7822 on January 23, 2017, and 82 FR 8185 on January 24, 2017), the same tools that were used to engage the public during the two scoping periods were used to notify the public and interested parties of the Draft EIS comment periods. Printed copies of the Draft EIS were also made available for public review at 22 local libraries. In total, the public comment period comprised 105 days.

Draft EIS open house meetings were held between December 5 and December 9, 2016, with 1,013 individuals attending five meetings in Oak Harbor, Port Townsend, Lopez Island, Anacortes, and Coupeville, Washington. During the Draft EIS public comment period, the Navy received 4,335 comments.

In September 2017, the Navy announced a delay in the release of the Final EIS in order to incorporate changes to the proposed action that could reduce noise impacts to local communities. The announced changes were based upon the accelerated introduction of new PLM technology that would reduce the Navy's requirement for FCLP. Additionally, the Navy announced two new scenarios to determine how the distribution of FCLP operations might affect noise impacts on the surrounding communities. These changes to the Final EIS analysis were announced in direct response to public comments received on the Draft EIS. Because the Preferred Alternative had not been determined at the time the Draft EIS was released, the Navy announced its Preferred Alternative on June 25, 2018, in advance of the publication of the Final EIS.

#### Final EIS

The Notice of Availability of the Final EIS was published in the Federal Register on September 28, 2018 (83 FR 49089), and in multiple local daily and weekly newspapers near the NAS Whidbey Island complex. The Final EIS addressed public comments received during the Draft EIS public comment period. contained updated information since the release of the Draft EIS in November 2016 and identified Alternative 2A as the Preferred Alternative. The Navy announced the publication of the Final EIS using the same public engagement tools used previously during scoping and following the release of the Draft EIS. Final EIS was mailed to all individuals, agencies, and organizations that requested a copy. Printed copies of the Final EIS were made available for public review at 22 local libraries and made publicly available on the project website at www.whidbeyeis.com. The Final EIS 30-day wait period ended October 29, 2018.

## Alternatives Considered

In developing the proposed range of alternatives that met the purpose of and need for the Proposed Action, the Navy reviewed requirements for Growler squadrons and unit-level squadron training in light of Title 10 responsibilities, existing training requirements and regulations, existing Navy infrastructure, and Chief of Naval Operations guidance to

support operating naval forces. Operational mitigations, including incorporation of PLM and a reduced number of pilots, were factored into all alternatives contained in the Final EIS. These factors reduced FCLP requirements by 30 percent when compared to projections in the Draft EIS. In addition, the Navy carefully considered public comments regarding the range of alternatives and the effects of aircraft noise on the Specifically, the Navy considered 10 surrounding community. additional alternatives related to moving some or all of the Growler community and conducting FCLP practice elsewhere. However, no other location has the facilities and functions necessary to effectively preserve and cultivate the expertise and knowledge base of the Growler community to support DoD requirements. In all, the EIS fully analyzed 15 action alternative/scenario combinations and, for public transparency, carefully documented in Section 2.5 of the Final EIS the rationale regarding the 10 additional alternatives that were considered but not carried forward for detailed analysis.

No Action Alternative: Under the No Action Alternative, the Proposed Action would not occur; this means the Navy would not operate additional Growler aircraft and would not add additional personnel at Ault Field, and no construction associated with the Proposed Action would occur. The No Action Alternative would not meet the purpose of or need for the Proposed Action; however, the conditions associated with the No Action Alternative serve as reference points for describing and quantifying the potential impacts associated with the proposed action alternatives.

Alternative 1: Alternative 1 would expand carrier capabilities by adding three additional aircraft and additional squadron personnel to each of the nine existing carrier squadrons and augmenting the Fleet Replacement Squadron (FRS) with eight additional aircraft and additional squadron personnel (a net increase of 35 aircraft, 335 Navy personnel, and 459 dependents to the region).

Alternative 2: Alternative 2 would expand expeditionary and carrier capabilities by establishing two new expeditionary squadrons, adding two additional aircraft and additional squadron personnel to each of the nine existing carrier squadrons, and augmenting the FRS with eight additional aircraft and additional squadron personnel (a net increase of 36 aircraft, 628 Navy personnel and 860 dependents to the region).

Alternative 3: Alternative 3 would expand expeditionary and carrier capabilities by adding three additional aircraft and additional squadron personnel to each of the three existing expeditionary squadrons, adding two additional aircraft and additional squadron personnel to each of the nine existing carrier squadrons, and augmenting the FRS with nine additional aircraft and additional squadron personnel (a net increase of 36 aircraft, 341 Navy personnel, and 467 dependents to the region).

From a purely operational perspective, the Navy would prefer to use OLF Coupeville for all FCLPs because it closely replicates the pattern and conditions at sea and, therefore, provides superior training. However, in an effort to balance the need for effective training with community impacts, the EIS analyzed five operational scenarios for each force structure alternative. The percentages depicted are used for general description of the scenarios.

**Scenario A:** Twenty percent of all FCLPs would be conducted at Ault Field, and 80 percent of all FCLPs would be conducted at OLF Coupeville.

**Scenario B:** Fifty percent of all FCLPs would be conducted at Ault Field, and 50 percent of all FCLPs would be conducted at OLF Coupeville.

**Scenario C:** Eighty percent of all FCLPs would be conducted at Ault Field, and 20 percent of all FCLPs would be conducted at OLF Coupeville.

**Scenario D:** Thirty percent of all FCLPs would be conducted at Ault Field, and 70 percent of all FCLPs would be conducted at OLF Coupeville.

Scenario E: Seventy percent of all FCLPs would be conducted at Ault Field, and 30 percent of all FCLPs would be conducted at OLF Coupeville.

The above five scenarios (A, B, C, D, and E), in combination with the three force structure alternatives, provide a total of 15 action alternatives that are fully evaluated in the EIS.

## Preferred Alternative

The Navy announced the Preferred Alternative, Alternative 2A, on June 25, 2018, prior to release of the Final EIS. The force structure under Alternative 2, adding 36 Growler aircraft to the NAS Whidbey Island complex, best meets operational demands by

both establishing two new expeditionary squadrons and adding two aircraft to each squadron that operates off aircraft carriers. Further, Scenario A was identified as the preferred scenario for FCLP distribution because it provides the best training for Navy pilots, results in the least disruption of other aircraft operations at Ault Field, and results in the fewest number of people being impacted by noise.

The primary impact to the community from implementation of the proposed action is an increase in noise exposure to residents. Therefore, the environmentally-preferred alternative is defined as the one with the smallest increase in number of people (as determined by an estimated percentage increase) exposed to annual noise levels of 65 A-weighted decibels (dBA) day-night average sound level (DNL) or above. Alternative 3A is the environmentally-preferred alternative because it has the smallest increase in number of people exposed to the 65 dBA DNL or greater noise levels, with an estimated 11.7 percent (1,312 people). Alternative 2A, the Navy's Preferred Alternative, has the next smallest increase of 11.8 percent (1,316 people, four more than under Alternative 3A) within the 65 dBA DNL or greater noise contour. For comparison, Alternative 1E has the greatest increase in number of people exposed to annual noise levels of the 65 dBA DNL or greater noise contour, with an estimated 16.8 percent increase (1,879 people, 567 more than under Alternative 3A).

# Environmental Impacts

The focus of the following discussion is on impacts associated with the Preferred Alternative (Alternative 2A), which proposes a net increase of 36 Growler aircraft, 628 Navy personnel, and 860 dependents to the region.

## Airspace and Airfield Operations

Under Alternative 2A, annual airfield operations at the NAS Whidbey Island complex would increase up to 33 percent over the No Action Alternative, for an estimated total of 112,100 operations annually, including 88,000 operations at Ault Field and 24,100 operations at OLF Coupeville. Of the 24,100 operations at OLF Coupeville, 23,700 would be EA-18G Growler FCLPs. Since each airfield "operation" is defined as either a takeoff or landing under this scenario, about 12,000 FCLP "passes" would occur annually at OLF Coupeville. This change amounts to an increase from approximately 90 hours (1 percent of total hours per year) to 360 hours (4 percent of total hours per year) in aircraft activity at OLF Coupeville.

These operational levels are comparable to historic flight operations experienced from the 1970s through the 1990s at the NAS Whidbey Island complex.

# Noise Associated with Aircraft Operations

The methodology used to analyze noise impacts associated with aircraft operations complies with current U.S. Federal Aviation Administration (FAA) regulations and the DoD's Air Installations Compatible Use Zones (AICUZ) Program. Pursuant to these regulations and policies, the Navy based its noise analysis on the 65 dBA DNL noise metric, as it is the current federal standard for determining potential for high annoyance from aircraft noise.

The current federal standard is based on research supported by the Federal Interagency Committee on Urban Noise (FICUN). This research indicated that about 87 percent of the population is not highly annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Most people are exposed to average sound levels of 50 to 55 dBA DNL or higher on a daily basis.

Since the International Organization for Standardization (ISO) and the World Health Organization (WHO) use a lower dBA DNL level to assess community noise impacts, the Final EIS summarized all new research on community annoyance from aircraft noise and included the 55 and 60 dBA DNL noise contours on all noise maps to provide more information to the public. However, the Final EIS analysis remains focused on the FAA regulations and guidance that are used in the United States, including Island County, to assess community noise impacts based on 65 dBA DNL. The EIS indicates that noise impacts on the community would increase compared to current conditions under Alternative 2A.

To provide additional information to the decision maker and the public, the Navy used supplemental metrics to identify potential impacts to the community from noise exposure using 48 points of interest (POIs) in the vicinity of the NAS Whidbey Island complex. Supplemental metrics included identifying increases in events of indoor and outdoor speech interference, classroom/learning interference, probability of awakening, and potential hearing loss.

Conversation or indoor speech is assumed to be interrupted when a single aircraft event exceeds the maximum sound level, or  $L_{\text{max}}$ , of 50 dB indoors (Sharp et al., 2009). Normal conversation is about 60 dB; therefore, the use of a 50 dB indoor level is a

very conservative threshold, such that a soft speaking voice could be heard. When compared to the No Action Alternative, Alternative 2A would result in up to two additional interference events per hour for nine points of interest (POI) (windows open), and for eight POIs (windows closed) (see Final EIS Table 4.2-13). Similarly, the analysis of outdoor speech interference is based on the number of events occurring per DNL daytime hour (7:00 a.m. to 10:00 p.m.) that are greater than the maximum sound level of 50 dB outdoors. Under Alternative 2A, 31 POIs would experience the potential for up to two additional average daily episodes over the No Action Alterative (See Final EIS Table 4.2-16).

The potential for classroom interference from single aircraft events generating sound levels inside classrooms greater than 50 dB L<sub>max</sub> would increase under Alternative 2A by up to two events per hour for Coupeville Elementary (windows open). The remaining schools in the study area either show no change from the No Action Alternative or an increase of one event per hour during the school day, primarily under the windows-open condition (see Final EIS Table 4.2-14). Under the windows-closed condition, there would be one additional event per hour of classroom/learning interference at four area schools, with all other schools remaining unchanged from the No Action Alternative.

The analysis of sleep disturbance is a calculation of the probability of awakening from aircraft overflights that occur between 10:00 p.m. and 7:00 a.m. Table 4.2-15 of the Final EIS presents the results of the sleep disturbance analysis for the 20 POI locations that are in the residential category, as well as the 10 schools, which are commonly located in residential areas.

Under Alternative 2A, Table 4.2-15 shows that 16 of the residential POIs (windows open), and 14 of the residential POIs (windows closed) analyzed show an increase in the percent probability of awakening for all scenarios during nights of average aircraft activity. The increase in nightly probability of awakening for the Preferred Alternative ranges from 0-29 percent with windows open, and from 0-21 percent with windows closed.

Regarding potential hearing loss, the analysis in Section 4.2.3.2.6 demonstrates that the potential for individuals to experience hearing loss is negligible.

As discussed in Final EIS Section 3.2.3 and Appendix A1 of the Aircraft Noise study, the data and research are inconclusive with respect to the linkage between potential nonauditory health effects of aircraft noise exposure. Although Alternative 2A would result in both an increase in the number of people exposed to noise, as well as an increase in levels of noise to those exposed, research conducted to date has not made a definitive connection between intermittent aircraft noise and nonauditory health effects. The results of most cited studies are inconclusive and cannot identify a causal link between aircraft noise exposure and the various types of nonauditory health effects that were studied. An individual's health is greatly influenced by many factors known to cause health issues, such as hereditary factors, medical history, and lifestyle choices regarding smoking, diet, and exercise. Research has demonstrated that these factors have a larger and more direct effect on a person's health than aircraft noise. Additional detail on the Navy's review and analysis of the 256 articles on this topic cited by EIS commenters is contained in Appendix A8 of the Final EIS Aircraft Noise Study.

# Public Health and Safety

The increase in operations proposed in Alternative 2A increases the risk for potential flight incidents and bird/animal aircraft strikes, but existing management strategies developed and overseen by U.S. Department of Agriculture (USDA) Wildlife Service staff will continue to be used to reduce the potential for strikes.

Pursuant to existing procedures, the Navy will perform an AICUZ Update, informed by this Record of Decision and Final EIS analysis in which the Navy will make land use recommendations to local government officials and the community for consideration in their future land use planning decisions.

Pursuant to Executive Order 13045, Environmental Health Risks and Safety Risks to Children, the preferred alternative will result in an increase of 233 children (19 years of age and younger) within the 65 dB DNL or greater noise contours under Alternative 2A over the No Action Alternative (see Final EIS Table 4.3-3). Although the available scientific literature is limited, existing studies are inconclusive regarding any causation between noise-related events and physiological changes in children. Given the limited scientific correlation and the intermittent nature of the noise associated with the alternatives, the Navy does not anticipate any significant, disproportionate health impacts to children caused by the

proposed action. There are currently no schools or other locations where children congregate located within the existing or conceptual APZs at Ault Field and OLF Coupeville under any of the alternatives or scenarios. Therefore, there is not a disproportionate safety risk to children.

# Air Quality

The implementation of Alternative 2A will increase the emissions of criteria pollutants, hazardous air pollutants (HAPs), and greenhouse gases from stationary and mobile sources. Under all three alternatives, Scenario A has the greatest potential increase in emissions because of the increase in inter-facility transit between Ault Field and OLF Coupeville. Construction emission impacts would be minor and temporary. All increases of emissions from stationary sources are expected to be covered under the existing NAS Whidbey Island Air Operating Permit.

The majority of the increase in emissions will come from mobile sources, primarily aircraft operations, but also employee commuting and use of other mobile equipment. Although mobile emissions are not subject to permit requirements, they contribute to regional emission totals.

Mobile emissions are not expected to cause significant air quality impacts or violations of air quality standards given the current air quality and that they are intermittent and dispersed over large areas. Air quality in the region is, and has historically been, in attainment for all National Ambient Air Quality Standards, and the total emissions throughout the region are, and have been, considered low. Recent air quality submittals by the State of Washington demonstrate that regional air quality is among the best in the state, with ozone design values far lower than standards. The Northwest Clean Air Agency continues to monitor ambient air emission levels to confirm continued compliance.

Alternative 2A will also emit greenhouse gases. However, the Department of the Navy has implemented numerous strategies to reduce greenhouse gas emissions, as well as criteria pollutants, and will continue to implement strategies and programs to reduce emissions from the NAS Whidbey Island complex and achieve DoD and Washington State energy and greenhouse gas reduction goals.

# Land Use

Alternative 2A would result in an increase in the land area within the projected 65 dB DNL or greater noise contours (17 percent). Past Navy recommendations to establish an Accident Potential Zone (APZ) at OLF Coupeville for the purpose of establishing land use controls and evaluating future land use plans were never adopted by the local municipality. Conceptual APZs at OLF Coupeville would impact 503 acres of residential land under Scenario A if adopted by the local municipality (see Final EIS Table 4.5-16).

Implementation of Alternative 2A would result in moderate impacts on wilderness recreation and management at the one uninhabited wilderness area within the Study Area, Williamson Rocks, which is part of the San Juan Island National Wildlife Refuge.

Implementation of Alternative 2A at NAS Whidbey Island complex would result in localized impacts on recreation as a result of increased noise exposure at Ebey's Landing National Historical Reserve, various county and municipal parks and recreational areas, and private recreational facilities. Depending on the location of the park, noise impacts would be intermittent, occurring only when aircraft are operating in the area. Additionally, there may be increased use of local parks and recreation areas as a result of personnel and their families moving into the region, however, impacts resulting from this increased demand would be minor.

#### Cultural Resources

The Navy coordinated its NHPA Section 106 process with the NEPA process for the purposes of the proposed action/undertaking, using the various public meetings and comments periods in the NEPA process to also solicit public comments on the effects of the undertaking on historic properties. Archaeological resources, architectural resources, and traditional cultural properties, including those listed or eligible for listing in the National Register of Historic Places (NRHP) (i.e., historic properties), were evaluated with regard to direct and indirect impacts/effects under NEPA and Section 106 of the NHPA.

In order to address cultural resources, the Navy defined the Area of Potential Effect (APE) as the area encompassed by the 65 dB DNL or greater noise contour, along with those lands that are a part of Ebey's Landing National Historical Reserve.

Direct impacts/effects were considered within areas oninstallation where cultural resources could be affected by
ground disturbance, demolition, or alteration. Indirect
impacts/effects were considered for on- and off-station areas
within the 65 dB DNL or greater noise contours and within the
entirety of Ebey's Landing National Historical Reserve,
regardless of whether those areas experienced a DNL increase.
Indirect impacts/effects constitute those that result from
construction (on-station) at Ault Field or from aircraft
operations (on- and off-station) occurring at both Ault Field
and OLF Coupeville. They could include impacts/effects from the
introduction of visual, atmospheric, and/or auditory (noise and
vibration) elements that occur during construction or when
aircraft are seen or heard flying in the vicinity of a resource.

Under NEPA, no significant impacts would occur to cultural resources, including archaeological sites, architectural buildings and structures, and traditional cultural properties.

Under NHPA Section 106, the Navy determined that, although intermittent, the proposed increased Growler operations would result in adverse indirect effects to the Central Whidbey Island Historic District by affecting the perceptual qualities of five locations that contribute to the significance of the landscape. The Navy found no other adverse effects, including no potential for direct effects on historic properties due to construction and demolition activities on-station and no indirect effects from noise-induced vibration to historic properties on- and offstation. The Navy determined that the increase in operations would not alter the visual experience, atmospheric elements, or setting of the historic properties within the Central Whidbey Island Historic District in ways that would diminish the district's ability to convey its historic significance. Washington State Historic Preservation Office (SHPO) concurred with the Navy's adverse effect determination on June 27, 2018. The Navy proceeded with resolution of adverse effects discussions with the SHPO, the Advisory Council on Historic Preservation (ACHP) and other consulting parties. See the consultation section of this ROD for more information on the Section 106 consultation process.

# American Indian Traditional Resources

Implementation of Alternative 2A at NAS Whidbey Island complex will not result in significant impacts to known American Indian traditional resources because there will be no change to current tribal access and no additional potential to impact known traditional resources in the study area.

In accordance with executive orders and DoD and Navy policies, the Navy invited government-to-government consultation with eight federally recognized tribes that could potentially be affected by the Proposed Action. Initially, the Swinomish Indian Tribal Community requested government-to-government consultation on the Proposed Action on December 13, 2016 and subsequently withdrew its request on September 27, 2017. No other requests for government-to-government consultation were received.

# Biological Resources

Biological resources are divided into two major categories in the EIS: terrestrial wildlife and marine wildlife. The three types of potential impacts to biological resources are from construction, operation of new aircraft, and bird/animal aircraft strike hazard (terrestrial wildlife only).

### Terrestrial Wildlife

The Final EIS indicates that vegetation removal would not negatively affect habitat use given its location within an urban/industrial area. Under Alternative 2A, the increase in sensory disturbance from the No Action Alternative would not result in a significant impact on terrestrial wildlife or a significant adverse effect on migratory bird populations. Existing management practices would continue to minimize the potential risk of a strike and intentional take of migratory birds is not anticipated. The Final EIS concludes that there would be no significant impacts to terrestrial wildlife from construction activities, operations of new aircraft, or bird/animal aircraft strike hazard under Alternative 2A.

One Endangered Species Act (ESA)-listed terrestrial species, the marbled murrelet (*Brachyramphus marmoratus*), is located within the study area. The Navy determined that the Proposed Action may affect the marbled murrelet, and therefore consulted with the U.S. Fish and Wildlife Service.

## Marine Wildlife

The Navy determined that potential impacts to marine wildlife would occur only from aircraft operations. Neither construction nor bird/animal aircraft strike hazard were expected to have any impacts on marine species, as these activities would have no inwater stressors. Increases in aircraft activity may cause sensory disturbances to marine species in the water or on seals at haul-out sites around NAS Whidbey Island complex. Given the

continued use of haul-out sites during existing intermittent overflights, sensory disturbance associated with the preferred alternative is not expected to significantly alter marine mammal behaviors. Pursuant to the Marine Mammal Protection Act, the Preferred Alternative would not result in the reasonably foreseeable taking (e.g., Level B harassment) of marine mammals incidental to the activity. The Final EIS concludes that no significant impact would occur to marine wildlife.

Two ESA-listed marine mammal species and eight ESA-listed fish species are located within the study area and may be affected by Alternative 2A: humpback whale (Megaptera novaeangliae), Southern Resident killer whale (Orcinus orca), bull trout (Salvelinus confluentus), green sturgeon (Acipenser medirostris), eulachon (Thaleichthys pacificus), Chinook salmon (Oncorhynchus tshawytscha), Hood Canal summer-run chum (Oncorhynchus keta), steelhead (Oncorhynchus mykiss), bocaccio rockfish (Sebastes paucispinis), and yelloweye rockfish (Sebastes ruberrimus). As the Navy determined the Proposed Action may affect ESA species, consultation with the National Marine Fisheries Service was conducted.

## Water Resources

There would be no significant direct impacts on water resources from construction activities or operation of 36 additional aircraft under Alternative 2A. No construction would extend to a depth that may impact groundwater resources, and there would be a minimal increase in demand for groundwater. Although fuel or other chemicals could be spilled during construction, implementation of best management practices (BMPs), such as immediate cleanup of these spills and use of containment systems, would prevent any infiltration into the underlying groundwater. Potential indirect impacts on water quality due to 2 acres of new impervious surface at Ault Field (a 1-percent increase over existing conditions) would slightly increase stormwater flow. Impacts would be minimized and avoided through implementation of BMPs.

# Socioeconomics

Alternative 2A would have minor impacts on the local and regional population levels and economy due to a net 2 percent increase of 1,488 people (see Final EIS Table 4.10-1). Construction impacts would result in temporary and positive impacts on the local economy with potential expenditures of up to \$122.5 million. An additional \$21.4 million in payroll would also be injected into the regional economy annually from

military members' salaries. The increase in local government tax receipts is estimated around \$415,000 annually for Island County and \$181,000 for Skagit County.

As many as 628 households would relocate to the area in phases under Alternative 2A. In 2017, a housing study completed for the NAS Whidbey Island complex found that there was a surplus of 54 acceptable family housing units in the area but a deficit of 914 unaccompanied personnel housing units. The regional housing supply may not have sufficient vacancies to handle the influx of personnel (requiring 628 housing units), causing an impact on the housing market. Given the short supply, housing affordability would likely be negatively affected.

Although real property values are dynamic and are influenced by a range of factors, including market conditions, neighborhood characteristics, and individual real property characteristics (e.g., the age of the property, its size, home amenities, and lot size), the increase in aircraft noise associated with Alternative 2A could affect property values. The actual change in value will vary from location to location. Numerous studies have concluded that property values are affected by many factors that make it difficult to discern the root cause of any change in home value.

Under Alternative 2A, local school districts, particularly the Oak Harbor School District, which is already overcrowded, would experience an increase in enrollment of 226 students (see Final EIS Table 4.10-7). Minimal to no impact is expected on medical, police, and fire services under Alterative 2A. The Navy has committed to working with the DoD Office of Economic Adjustment to support funding for both Oak Harbor and Crescent Harbor Schools to help alleviate overcrowding.

# Environmental Justice

Minority populations and low-income populations live within the affected environment. Under Alternative 2A, the Navy has determined that there will be no disproportionately high and adverse human health or environmental effects from noise, Clear Zones/APZs, or school overcrowding on minority populations or low-income populations. Although these impacts from the Preferred Alternative are significant, they are expected to be felt similarly across all populations. The Navy has, however, concluded that impacts on housing availability and housing affordability could have the potential to disproportionately affect low-income communities. The Navy further acknowledges that the likely increase in the cost of housing and the decrease

in available properties may have a negative impact on low-income residents, who typically spend a larger proportion of their income on housing than the general population. The Navy has committed to conducting a follow-up housing market analysis study after this Record of Decision that will analyze projected housing needs and inform future planning for both the Navy and the community.

# Transportation

Construction impacts would result in increased traffic on and off the installation, but roadways would be able to handle the increase. An increase in personnel and dependents would result in an increase in traffic on local roads. Under Alternative 2A, there would be an estimated 229 to 3,845 new trips per weekday on major roadways off base. Traffic would be spread throughout roads in Island and Skagit Counties, and, although there would be some degradation of service, it would not be expected to result in level of service falling below established level of service standards. No significant increase in use of transit, pedestrian, and bicycle facilities would occur because the majority of new traffic would be automobile-based.

# Infrastructure

Under Alternative 2A, increased consumption or demand would occur for water, wastewater, stormwater, solid waste management, energy, and communications systems from the increase in population and households that would be spread throughout Island and Skagit Counties. Existing and future capacity is expected to handle the increases in demand; therefore, no significant impacts are expected. These new facilities demands are not expected to result in significant impacts.

## Geological Resources

Construction under Alterative 2A would include only minor grading activities; therefore, no significant impacts on geologic resources would occur, as there would be no clearing or blasting of earth or rock. There would be no impact on resistance to seismic events because all buildings constructed under the Preferred Alternative would be designed to conform to the seismic provisions of the Washington State Building Code, and a Spill Prevention, Control, and Countermeasure plan would be in place during construction. Impacts on soils during construction could include compaction and rutting from vehicle traffic and an increase in erosion, but impacts would be minimized through the use of BMPs.

## Hazardous Waste and Materials

No significant impacts related to hazardous waste and materials would occur due to construction activities or from the addition and operation of additional Growler aircraft under Alternative 2A. Hazardous materials and wastes would increase in quantity but would be managed under existing law, Navy regulations and BMPs. Existing practices and strategies would successfully manage the use and disposal of these materials. No proposed construction activities would occur within or in proximity to any Defense Environmental Restoration Program sites; therefore, ongoing remedial programs would not be impacted.

# Climate Change and Greenhouse Gases

Climate change will continue to occur, resulting in global impacts affecting Whidbey Island and Puget Sound and the Navy's priorities and mission. Federal, state, and local agencies, including the DoD, will continue to assess impacts and define adaptation and mitigation strategies to address them. Stationary greenhouse gas (GHG) emissions would increase by 4 percent under Alternative 2A when compared to the No Action Alternative. Mobile GHG emissions would increase by 40 percent under Alternative 2A when compared to the No Action Alternative. The increase in GHG emissions from implementation of Alternative 2A equates to less than 1 percent of all aircraft GHG emissions in Washington. Therefore, the GHG emissions from the Preferred Alternative would not have a significant impact on Washington's GHG emission goals.

## Cumulative Impacts

Chapter 5 of the Final EIS describes how construction, increased aircraft operations, and increased personnel would contribute to regional cumulative impacts by resource in conjunction with past, present, and reasonably foreseeable future actions as identified in Table 5-1. While airspace will be used more often as a result of the Navy's action, no changes in airspace classification are expected, no significant impacts on civilian and commercial use of the airspace are anticipated, and civilian and commercial aircraft operations are not expected to change the noise environment above those changes driven by the Navy's proposed action in the vicinity of the two airfields. Implementation of Alternative 2A and the use of BMPs and other minimization efforts would not result in significant cumulative impacts to other environmental resources (including air quality, land use, cultural resources, American Indian Traditional resources, biological resources, water resources, geological

resources, hazardous materials and waste, as well as climate change and greenhouse gases) within the study area. The potential cumulative effects would also not be significant with respect to socioeconomics, environmental justice, transportation and infrastructure.

### Mitigation Measures

The Navy has adopted all practicable means to avoid or minimize environmental harm. Efforts to reduce noise impacts on the community are detailed in Appendix H to the Final EIS and include limiting noise, land use planning and management, and noise abatement operational procedures. One of the Navy's most significant mitigations is the commitment to employ PLM (a.k.a. Magic Carpet) technology, which, when combined with a reduction in the number of pilots per squadron, reduced the number of proposed aircraft operations under the preferred alternative as identified in the Draft EIS by 30 percent. The Navy remains committed to implementing the measures identified in Appendix H to the Final EIS to minimize auditory, visual, and atmospheric effects of flight operations on the surrounding community. discussed in Appendix H, there have been noise abatement and mitigation measures in place at the Whidbey Island complex for decades, which have been optimized to move aircraft operations away from population centers. These measures will continue to be implemented. Amongst these noise mitigation measures included in Appendix H are: continuing to inform the public of upcoming FCLP schedules and other events that may increase noise impacts; continuing to restrict high power jet aircraft turns prior to noon on Sundays and daily between 10:00pm and 7:30 a.m.; continuing to review operational procedures for changes that reduce noise while supporting safe, effective mission execution; and, continuing to collaborate with the community on compatible land-use planning initiatives under the AICUZ and REPI programs.

With respect to mitigating impacts to the perceptual qualities of five historic landscapes located within the Central Whidbey Island Historic District, the Navy will provide \$867,000.00 to the National Park Service (NPS) to support Ferry House preservation projects that meet the Secretary of the Interior standards for preservation. In addition, the Navy will provide up to \$20,000.00 to the NPS for the design, construction, and installation of interpretive historical signs at appropriate locations. The Navy will also seek partnership opportunities through the REPI program by working with the community to identify potential projects and communicating its support for those projects to decision-making officials in the DoD.

Finally, the Navy is willing to collaborate with stakeholders to evaluate the benefits of designating historic landscapes within the APE as Sentinel Landscapes.

# Agency Consultation and Coordination

The results of agency consultation and coordination under Alternative 2A are summarized as follows:

National Historic Preservation Act, Section 106. The Navy consulted with the Washington SHPO, Indian tribes, representatives of local government, the ACHP, and other interested individuals and organizations (consulting parties) from October 2014 until terminating consultation on November 30, 2018. As part of that process, the Navy defined the APE to include on-installation direct effect areas, on- and offinstallation indirect effect areas, and the Ebey's Landing National Historical Reserve. The Navy consulted on the scope of the APE and provided the public and consulting parties with a detailed effects determination. The Navy determined that, although intermittent, the proposed increased Growler operations would result in adverse indirect effects to the Central Whidbey Island Historic District by affecting the perceptual qualities of five locations that contribute to the significance of the landscape. The Navy found no other adverse effects, including no potential for direct effects on historic properties.

The Navy provided these findings to the consulting parties and the public on June 25, 2018. On June 27, 2018, the SHPO concurred with the Navy's determination, which restated the definition of the APE as well as the Navy's determination that the undertaking would have no direct effects on historic properties. The Navy continued consultation to develop and evaluate alternatives or modifications to avoid, minimize, or mitigate the adverse indirect effects to the perceptual qualities of the five identified locations. Between June and November 2018, the Navy supported extensive opportunities for public participation in these discussions. These engagements were in addition to the NHPA discussions that had occurred throughout the Section 106 consultation process in coordination with the development of the Navy's Environmental Impact Statement (EIS). Unfortunately, although the parties agreed on the adverse indirect effects on historic properties expected to result from the undertaking, an impasse on the type and amount of commensurate mitigation precluded reaching agreement on mitigation.

The Navy worked diligently to find mitigation measures acceptable to all stakeholders before terminating consultation and inviting ACHP comment on November 30, 2018. In accordance with 36 C.F.R. § 800.7(c)(4), ACHP provided their comments on February 19, 2019 and the Navy responded on March 8, 2019 thus concluding the consultation process. In the Navy's response letter, the Secretary of the Navy provided his rationale for moving forward with the undertaking and committing to certain mitigation measures discussed earlier in the ROD.

In accordance with section 7 of the ESA, the Navy consulted with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. The Proposed Action may affect marbled murrelet, bull trout, green sturgeon, eulachon, Chinook salmon, Hood Canal summer-run chum, steelhead, bocaccio rockfish, yelloweye rockfish, Southern Resident killer whale, and humpback whale. The National Marine Fisheries Service concurred with the finding that the Proposed Action is not likely to adversely affect endangered or threatened marine mammals and fish, respectively, on July 20, 2017, and April 23, 2018. Although the Navy determined that construction would not affect ESA-listed marine species, the National Marine Fisheries Service determined that construction activities may affect, but are not likely to adversely affect, humpback whales, Southern Resident killer whales, and Southern Resident killer whale critical habitat, due to a potential for increased stormwater runoff. The U.S. Fish and Wildlife Service concluded in its June 14, 2018, Biological Opinion that the Proposed Action is not likely to jeopardize the continued existence of the marbled murrelet. As required by the terms and conditions associated with the Incidental Take Statement (ITS) for the marbled murrelet, the Navy must monitor the implementation of the Proposed Action and submit an annual report to the U.S. Fish and Wildlife Service describing Growler flight operations from the previous year to ensure the ITS is not exceeded. The U.S. Fish and Wildlife Service also concluded that the Proposed Action may affect but is not likely to adversely affect the bull trout.

Coastal Zone Management Act. After careful consideration of the information, data, and analysis provided in the EIS, the Navy determined that the Proposed Action (regardless of the alternative chosen) will be undertaken in a manner fully consistent with the applicable objectives and the enforceable policies of Washington's Coastal Resources Management Program. Pursuant to the federal Coastal Zone Management Act and the state's Washington Coastal Zone Management Program, concurrence

was received from Washington Department of Ecology on September 20, 2017.

# Responses to Comments Received on the Final EIS

The Navy reviewed and considered all comments that were received during the 30-day wait period following publication of the Notice of Availability for the Final EIS as well as 84 postcards that were received after the 30-day waiting period had ended. Eight comment submittals were received from four entities (USEPA, Washington State Governor, a citizens group and a resident). Common themes identified in these submittals were concerns related to noise, air quality, nonauditory health effects, noise monitoring, a health impact assessment, economic impacts, quality of life impacts, and public involvement. general, the public comments received following the publication of the Final EIS are consistent with public comment themes received during scoping and Draft EIS public comment periods, adding no new substantive information that was not already considered in the preparation of the Final EIS and in this Record of Decision.

While these are not substantive or new comments, the following summarizes issues raised in comment submittals on the Final EIS:

Request to conduct noise monitoring. Noise modeling, rather than noise measurements taken with monitors, is used to assess noise exposure because it is the most accurate method of estimating noise exposure. Noise modeling is the accepted method by both the Department of Defense and the Federal Aviation Administration (FAA) for noise impact analysis and it has been validated and upheld by the courts. Given the extensive historic use of DoD noise modeling, including the use of actual noise measurements during engine noise profile development, the Navy decided no additional noise monitoring was needed. Further, the noise analysis conducted as part of this EIS provides sufficient information to support an informed decision on the proposed action. See Section 3.2.2 of the Final EIS for more detail.

Continued use of the 65 dBA DNL metric. The Navy focused its analysis on the 65 dBA DNL using FAA regulations and guidance that are used in the United States, including Island County, to assess community noise impacts. Recognizing that other international organizations use a lower 55 dBA DNL, the Final EIS summarized all new research on community annoyance from aircraft noise and included the 55 and 60 dBA DNL noise contours

on all noise maps in order to provide more information to the public.

Request to prepare a Health Impact Assessment (HIA). The Navy concluded that an HIA would be largely redundant with the NEPA analysis. As described in Appendix I of the Final EIS, the EIS analysis exceeds the purpose and scope of an HIA and satisfies the best practices including public stakeholder engagement by: preparing an extensive and transparent literature review, assessing the effects using the best available science (data, methods and metrics), considering vulnerable population groups (children, minorities and low-income populations), and considering reasonable mitigation. The literature review of existing research does not support a significant causal link between aircraft noise and non-auditory health effects. operations have been ongoing at NAS Whidbey Island since the 1960s and the EA-18 Growler was introduced in 2008. The Navy's review of public health factors and student scholastics performance metrics found Island County to be one of the healthiest places to live and work, and that students are more academically successful than many of their peers across the state of Washington.

Of the 14 published articles provided with comments on the Final EIS, five articles were already analyzed in the Final EIS and the remaining nine articles were found to contain no new information compared to that already presented in the Final EIS. The Navy acknowledges that the medical and scientific communities will continue to conduct research and generate new data in an effort to expand and improve their understanding of non-auditory health effects. Therefore, the Navy will continue to review new published research and peer-reviewed journal articles and will evaluate how the latest information applies to and informs the Navy's noise analysis under NEPA and AICUZ processes.

Request for more quantitative analysis of air emissions. The Final EIS quantified and evaluated the change in emissions from construction, operations, and mobile sources that will be associated with this action. These emissions are dispersed over a large area or would occur on the ground at Ault Field at a reasonable distance from the general public. Air quality in the region is in attainment with all National Ambient Air Quality Standards (NAAQS), as ambient levels of criteria pollutants are considered to be very low in the area. Although each alternative increases emissions of criteria pollutants, including HAPs, over the no-action levels, the Navy refined its quantitative air quality modeling between the release of the

Draft EIS and the Final EIS. The updated modeling included refining certain flight profiles/aircraft operating assumptions and incorporation of PLM. This has resulted in both a reduction in aircraft operations and a 31 percent reduction in projected criteria pollutant emissions between the Draft EIS and the Final EIS. The Navy concluded that the quantitative analysis in the Final EIS is sufficient to support the assumed attainment of NAAQS and the Northwest Clean Air Agency (NWCAA)'s air quality planning efforts in order to manage mobile source emissions and, therefore, does not believe additional emissions modeling is necessary.

Resolution of quality of life impacts. There was a request for the Navy to address quality of life issues such as sound-proofing homes, increasing funding to schools, providing affordable housing, acquiring land from willing sellers, etc. These topics have been discussed with the Governor of Washington as well as other federal, state and local elected leaders. Many of these items involve actions outside the Navy's current fiscal authority (i.e., soundproofing of private buildings). Some of the other requests (more school funding, land acquisition) involve programs not administered or controlled by the Navy.

As noted earlier, the Navy will continue to implement noise mitigation measures contained in Appendix H of the Final EIS. The Navy will continue to pursue innovative technology to reduce aircraft engine noise. The Navy has also committed to conducting a follow-up housing market analysis study and performing an AICUZ update for consideration by local government agencies in their future planning decisions. Finally, the Navy has committed to working with the DoD Office of Economic Adjustment to support funding for both Oak Harbor and Crescent Harbor Schools to help alleviate overcrowding.

C. CONCLUSION: After careful consideration of the purpose and need for the proposed action; operational and readiness requirements; manpower requirements; the analysis of environmental effects in the Final EIS; relevant federal and state statutes and regulations; relevant DoD and Navy policies; existing and proposed mitigation; and the comments received from the public, I have decided to proceed with implementation of the Preferred Alternative (Alternative 2A). As described in Section 2.4 of the Final EIS, Alternative 2A best meets the operational needs of the Navy and has less environmental impacts overall than most of the other alternatives. The increase in Growler operations at NAS Whidbey Island complex will significantly enhance our electronic warfare capabilities. It is of paramount interest to preserve the operational readiness of this national asset.

Date

Phyllis Z. Bayer

Assistant Secretary of the Navy

(Energy, Installations & Environment)